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Susannah Anderson, PhD, MPH, Eric Jenner, PhD, MMC, Katherine Lass, MPH, LMSW, Samuel Burgess, MA, MSHCM

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Susannah Anderson, PhD, MPH

Eric Jenner, PhD, MMC

Katherine Lass, MPH, LMSW

Samuel Burgess, MA, MSHCM

Susannah Anderson*, PhD, MPH, is a Research Fellow, Policy & Research Group, New Orleans, Louisiana, USA (susannah@policyandresearch.com). Eric Jenner, PhD, MMC, is Director of Research, Policy & Research Group, New Orleans, Louisiana, USA. Katherine Lass, MPH, LMSW, is Lead Research Analyst, Policy & Research Group, New Orleans, Louisiana, USA. Samuel Burgess, MA, MSHCM, is Prevention Manager, Louisiana Department of Health, Office of Public Health, STD/HIV Program, New Orleans, Louisiana, USA.

Corresponding Author: Susannah Anderson: susannah@policyandresearch.com

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Abstract

We present perspectives of health care providers and clinic staff on the implementation of a financial incentive program for clients living with HIV in 3 Louisiana clinics. Interviews were conducted in May-June 2015 with 27 clinic staff to assess their perspectives on implementation of the Health Models financial incentive program, which was initiated in September 2013. Many providers and staff welcomed the program, but some were concerned about sustainability and the ethics of a program that paid patients to receive care. Most said they eventually found the program to be helpful for patients and clinic operations in general, by facilitating partnerships between providers and patients, improving appointment keeping, providing opportunities for patient education, engaging patients in care, and helping patients form new prevention habits. The findings can improve understanding of staff and leadership perceptions of incentive programs and can inform planning and implementation of these programs in the future.

Key words: health care providers, HIV treatment, incentive program, program implementation, viral suppression

Perspectives of HIV Clinic Staff on the Implementation of a Client Financial Incentives Program
Targeting Viral Suppression

Inconsistent adherence to antiretroviral therapy (ART) for HIV may result in reduced treatment efficacy (inability to achieve viral suppression), more resistant viral strains, and progression to AIDS (McNabb et al., 2001). Many programs have aimed to improve medication adherence and rates of viral suppression for persons living with HIV (PLWH) by providing education about the importance of adherence, technology to remind patients to take their medication, and financial incentives to remain adherent (Nieuwlaat et al., 2014). Because failure to attend clinic visits is a significant predictor of treatment failure, medication adherence programs have also targeted appointment keeping (Lucas, Chaisson, & Moore, 1999).

Programs that aim to improve rates of viral suppression for PLWH must consider external factors that impact individual ability or likelihood of attending clinic appointments or consistently taking medication. PLWH have demands that compete with health care maintenance, such as work schedules or family obligations. Stigma may impact appointment keeping or adherence to medication because of fears of disclosure of HIV status (Mahajan et al., 2008). Structural barriers, such as transportation, may also impact adherence (Coetzee, Kagee, & Vermeulen, 2011).

In this paper, we address a gap in research regarding financial incentive programs designed to increase viral suppression. Successful implementation of a program such as this requires an understanding of the organizational and staff contexts (Damschroder et al., 2009; Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). Although research has suggested that incentives may be an effective method for improving medication adherence for PLWH (Petry, Rash, Byrne, Ashraf, & White, 2012), the success of incentive programs is dependent, in part, on their acceptability to the clinic staff who facilitate the programs. There is evidence that providers' opinions on financial incentives programs improve after implementation (Greene et al., 2014), but there is limited research on perspectives of clinic staff on incentive programs for patients with HIV, provider willingness to participate in such programs, or strategies for improving implementation. Unless clinic leadership and staff support the need for and value

of new innovative strategies, the program is unlikely to be implemented well or achieve desired outcomes (Lamb, Greenlick, & McCarty, 1998). Understanding staff and leadership perceptions of such programs, which are unfamiliar and potentially controversial, can inform planning and ultimately improve the implementation of these programs.

Financial Incentive Programs

Financial incentives programs aim to impact health status by increasing the benefits of adherence to medication or other health-related behaviors. Beginning in the 1970s, monetary compensation was used to incentivize abstinence from substance use for patients with substance abuse disorders (Lussier, Heil, Mongeon, Badger, & Higgins, 2006). Financial incentives have been used to improve patient adherence to medication regimens for communicable diseases such as tuberculosis and hepatitis (Giuffrida & Torgerson, 1997; Petry et al., 2012). Similarly, financial incentives increase the likelihood that patients will attend appointments for preventive care (Lussier et al., 2006). While the incentive amount and form (e.g., voucher, gift card) can impact the effectiveness of these programs, offering financial incentives to patients significantly increases their likelihood of abstaining from drug use and improves appointment keeping and medication adherence (Lussier et al., 2006).

Randomized controlled trials have demonstrated the effectiveness of financial incentive programs for improving some health-related behaviors and incentivizing behavior change. Financial incentives have successfully improved the likelihood of losing weight and of smoking cessation in randomized controlled trials (Volpp et al., 2008; Volpp et al., 2009). But, in a study of persons with diabetes, peer mentoring was a more effective intervention for controlling glucose than financial incentives (Long, Jahnle, Richardson, Loewenstein, & Volpp, 2012). For patients with severe mental illness, financial incentives were associated with an increase in adherence to psychiatric treatment, although the effect did not persist after incentives were removed (Burton, Marougka, & Priebe, 2010).

Recent literature reviews related to financial incentives for HIV treatment adherence recommended that such programs consider how economic and external factors affect individual client behaviors by including components of both economic theory and behavior change theory (Bassett,

Wilson, Taaffe, & Freedberg, 2015; Galárraga, Genberg, Martin, Laws, & Wilson, 2013). For example, in the Galárraga et al. (2013) conceptual model, which illustrated the multilevel determinants of medication adherence, individual client factors such as motivation and self-efficacy, along with the time and financial costs of ART, impacted client medication adherence and, ultimately, their viral loads. These relationships occurred within the context of individual (insurance, socioeconomic status), interpersonal (stigma, social support), and societal factors (social services); contexts impacted access to care and likelihood of seeking care and, consequently, remaining adherent to ART (Galárraga et al., 2013).

Research on the effectiveness of financial incentives programs for PLWH has been mixed. Several randomized controlled trials have investigated the effect of financial incentive programs on viral load, linkage to care, and retention in care, but the majority of these studies have not reported lasting improvements in viral load, linkage to care, or retention in care (Metsch et al., 2016; Rigsby et al., 2000; Rosen et al., 2007; Sorensen et al., 2007). Several studies have reported short-term improvements (Galárraga et al., 2013), while others reported improvements for specific populations, such as persons in treatment failure, or clients at certain sites, such as clinics whose clients had low average levels of viral suppression (El-Sadr et al., 2015; Javanbakht, Prosser, Grimes, Weinstein, & Farthing, 2006).

Improving medication adherence and appointment keeping can improve patient health as well as reduce treatment and clinic costs. Clients living with HIV who are in regular care overall have better health outcomes than patients who are not in regular care (Horstmann, Brown, Islam, Buck, & Agins, 2010). When clients miss scheduled appointments, they miss needed health care, and missed appointments impact clinic efficiency and increase clinic costs (Deyo & Inui, 1980). Financial incentive programs for ART adherence and achieving viral suppression aim to improve long-term health status, minimize economic costs related to treatment failure, and reduce community risk by decreasing patient viral loads.

Health Models Financial Incentive Program

We provide information here regarding clinic staff perceptions of a financial incentives program for PLWH in selected clinics in Louisiana. Staff members involved in implementation of the program

included direct providers of health care, such as physicians and nurses, as well as staff in social services, administrative staff, and client support staff. For this reason, we included perspectives of staff who provided services for clients from a variety of professional positions. The Health Models incentive program was implemented in New Orleans, LA, and Baton Rouge, LA, from September 2013 to September 2015, in partnership with leaders at each of the participating clinics. Health Models was implemented as part of the Centers for Disease Control and Prevention Care and Prevention in the United States Demonstration Project (CAPUS), which aims to reduce health disparities among people of color living with HIV. The Louisiana Office of Public Health Sexually Transmitted Diseases (STD)/HIV program (2013) was one of eight CAPUS grantees.

In 2013, Louisiana ranked third highest in AIDS case rates and eleventh in the number of AIDS cases diagnosed in the nation (Office of Public Health STD/HIV Program, 2013). African Americans accounted for 68% of PLWH in Louisiana, and the HIV diagnosis rate for African Americans was five times greater than that for White persons. In 2013, 70% of persons newly diagnosed with HIV were African American. The Baton Rouge Metropolitan Statistical Area had the third highest rate of new AIDS cases in the country in 2013, and the New Orleans Metropolitan Statistical Area had the fifth highest rate (Office of Public Health STD/HIV Program, 2013).

In September 2013, the Office of Public Health STD/HIV Program implemented Health Models in three HIV specialty clinics, two in New Orleans and one in Baton Rouge. When the program was implemented, the three clinics collectively served approximately 1,700 patients, of which 54% were African American. At the time of program implementation, only 49% of the clinics' combined patients were virally suppressed.

The Health Models strategy is a pay-patients-for-performance intervention that was originally offered to all new and existing patients at the three participating clinics. It provided PLWH at the clinics with financial incentives to attend clinic appointments, to attend referral service appointments, and to achieve and maintain viral suppression. Initial implementation of the program was consistent in the three participating clinics. One year into the program, at the clinic that served a larger population than the

others, program coordinators prioritized clients who were newly diagnosed, returning to care after being out of care, and recently released from prison or jail. Program coordinators at each clinic used brief case management techniques to enhance client navigation at all stages of care, engage and retain clients in care, encourage treatment adherence, and refer clients to critical support and prevention services. Clients were provided financial incentives for the following: attending first intake or reengagement appointment (\$50 USD), attending lab appointments (\$10 USD), attending care appointments (\$20 USD), attending appointments to a referred service (\$10 USD), and achieving or maintaining viral suppression (\$75 USD). Health Models coordinators purchased, distributed, and monitored all incentives. The goal of Health Models was to increase the proportion of clients in each of the three clinics who were retained in care, who achieved viral suppression, and who maintained viral suppression. The scope of the program was broad in that it intended to incentivize behavior change for those in care as well as those out of care. For those who were in care, Health Models provided incentives to stay in care and to reduce viral loads. For those who were out of care, the Health Models program provided incentives to reengage or link to care and to subsequently reduce viral loads.

Methods

In May and June 2015, semi-structured interviews were conducted in person with 27 staff members at three HIV specialty clinics in Baton Rouge and New Orleans who were not involved in the design of the financial incentives program. This study is part of a larger research project determined by an external institutional review board not to constitute human subjects research. These interviews were conducted with clinic staff to gather program-specific information in the form of program evaluation. In our study, we included all clinics that participated in the incentives program. The clinics were selected because they provided health care for a large proportion of PLWH in the New Orleans and Baton Rouge areas. Interviews were conducted with a convenience sample of staff from administrative, medical, nursing, peer support, case management, behavioral health, and reception departments at each site.

The Office of Public Health STD/HIV Program Health Models program monitor worked with program coordinators and clinic directors at each site to develop a list of 10 potential interview

participants per site who had experience with the incentive program and who had varying levels of interaction with program clients. All staff on these lists were contacted and asked to participate in an interview; three failed to respond to multiple requests by email. Nine staff members were interviewed at each clinic about their perceptions of the program's effects on clinic operations, relationships between staff and clients, and client engagement with health care. Interviewees included seven clinical staff members (e.g., nurses and physicians), five social services staff members (e.g., case managers and social workers), seven patient support staff members (e.g., jobs coordinators, receptionists, patient navigators), and eight administrative or supervisory staff members (e.g., chief executive officers, medical directors). The three staff members who did not respond to our requests for interviews worked in social services and patient support services.

An interview guide was developed based on research questions, which aimed to identify staff perceptions of the adoption and efficacy of the program, client responses to the program, and effects on client engagement, staff-client relationships, and clinic operations. The interview guide included broad questions followed by open-ended probes and follow-up questions to elicit information about the research questions and any new themes that emerged from the interviews. The interview guide included questions about implementation of the program (*What was the general reaction staff in this clinic had when they learned this strategy would be implemented here?*); effects on clients, staff, and clinic operations overall (*Could you tell me about whether the program has affected the normal clinic operations at all?*); and sustainability of the program (*How sustainable do you think this program is for HIV care?*).

Semi-structured interviews were conducted by two research analysts trained in qualitative data collection and overseen by senior researchers. Two interviewers were present during each interview. Interviewers received the same training and used the same protocols to ensure consistency across interviews, and interview recordings were reviewed to assess fidelity to the protocol. Prior to each interview, participants gave verbal consent and were assured of confidentiality. Participants were not financially compensated for participating in interviews. Interviews lasted approximately 20-45 minutes.

All interviews were audio-recorded and transcribed. Two research analysts reviewed transcripts

of the 27 interviews, identifying patterns in respondents' answers to the research questions as well as emergent themes, and then coded them using applied thematic analysis (Guest, MacQueen, & Namey, 2012). A senior researcher monitored initial coding, and researchers met regularly during the coding process to ensure inter-coder reliability. Because of initial review and regular meetings about coding consistency, no inconsistencies emerged in the coding. Transcripts were coded using Microsoft Excel, first based on the research questions, and then based on themes that emerged from the interviews. We assessed whether responses to the key research questions varied based on type of staff member and based on the clinic location.

Results

In 27 interviews, clinic staff described their experiences with the implementation of the Health Models financial incentives program. The program was initiated in September 2013, and the interviews were conducted in May-June 2015. In this section, results are organized based on the original research questions as well as themes that emerged from the interviews. We discuss initial responses of clinic staff to the program, concerns raised by interviewees, perceptions of the program's impact on client behaviors and clinic operations, and perceptions of the long-term value and sustainability of the program.

Overview of Reactions to the Program

We asked interviewees about their initial perceptions of the program and about whether the initial response changed over time. Initial reactions to the program were mixed. Most staff members welcomed it as an opportunity to provide additional services to patients (78%; $n = 21$), but others considered it an inappropriate use of funds (22%; $n = 6$). Staff members who worked in social services tended to view the program more positively from the beginning; those who were initially opposed had a variety of professional positions. After the initial implementation phase, some staff members remained skeptical of the ethics of the program, but all respondents (100%; $n = 27$) said they eventually considered it helpful for patients and for the clinic overall. Support did not vary based on clinic or location. Most participants at the clinics welcomed the program initially, and all considered it helpful at the end of the program.

Below we describe this transition; we outline participants' concerns about the incentives program

and ways in which they viewed it as helpful. These reactions can inform efforts to implement financial incentive programs for various medical conditions and health behaviors in order to ensure acceptance of the program by clinic and program staff. For staff who changed their opinions of the value of the program or its ethics, we delineate the reasons they provided to explain this change. Of those who were initially opposed, all raised concerns about the ethics of a program that paid patients to receive health care. Most of the staff said that they eventually believed the program to be helpful, but some retained initial concerns that it was an inappropriate use of funds.

Whether they changed their minds or not, the majority of persons we interviewed said that, by the end of the program, they believed that the program helped them provide better care for patients and helped clinic operations run more smoothly. In the sections below, we first outline the opposing perspectives held by clinic staff at the start of the program; then we turn to a description of the perceived benefits that many said ultimately persuaded or convinced them that the program was an acceptable or even welcome tool in their efforts to reduce client viral loads. By the end of the program, most clinic staff believed that the program improved appointment keeping by clients who were provided financial incentives and that it allowed them to assist patients with nonmedical needs. Some saw the program as an opportunity to impact community health beyond the clinic's patients. Finally, we discuss participants' perspectives on sustainability and long-term impacts of the program – some believed that the program prevented more costly medical problems in the future, while others worried that the program was not sustainable on a large scale.

Initial advocates. Although there were some initial dissenters, most staff members said that they had an initial positive reaction toward the program's introduction in their clinics, describing it as a welcome opportunity to provide additional care and resources to clients. A medical case manager said that clinic staff were enthusiastic about implementing the program because they would be able to serve additional clients, saying, "Well, we gonna have more people getting into care. And, that's one of the things we would talk about. Everybody was excited."

Staff members who had close contact with patients said the financial incentive would be a strong

motivator for low-income clients and might help reduce barriers to care. A client-services staff member said, “I thought it was a way to keep people engaged in care because I know it is challenging to keep certain groups engaged in care for multiple reasons, whether it be barriers or access or just distrust of the system.” Several described the program as an opportunity to provide additional resources for clients that otherwise would not be available. One nurse said,

I thought that it was a great – a great program to help the patients ... You know, they may need it for groceries ... It just all depends on the need of that particular client, and all of them can use some extra funding.

Initial dissenters. Some staff remembered that they had initially been resistant to the idea of the program when it was first announced. Several said that they or their co-workers questioned the ethics, fairness, and practicalities of the program. A leader at one clinic said that other administrative staff had “a basic, philosophical outlook that [the program] should not be necessary.” Others questioned the long-term impacts of the program and the potential for the incentives to be used for harmful purposes. A nurse practitioner described initially feeling that the program was “a bribe to take your medicine, and so [I] had a few mixed feelings about that.” Another staff person described having reservations despite understanding the reasoning for the program, saying, “Knowing the reason why it’s being done and making sure that people are virally suppressed, then it makes a lot of sense, but initially ... I thought, these people are crazy.” Others expressed concerns that the program would be a burden on staff members, that it could lead to a sense of entitlement among clients, and about the potential for the incentive to facilitate harmful behaviors.

Participant concerns. The most common objection to the program was a disagreement with its premise – providing a financial reward for receiving health care. One clinic leader described a belief among other administrators that clients should take “personal responsibility” for their care. Others expressed disbelief that clients with medical needs required additional incentives to access available health care. One provider said, “It just bewilders me that someone has to be incentivized to take care of themselves, to be healthy, especially when the care is either free already or, you know, very inexpensive

to them.”

Some said that they worried that Health Models would overburden already busy staff members; others described a busy adjustment period as clinics enrolled many new clients in the program. Initially, staff said that implementation was hectic, particularly as many clients learned about the program and became interested in enrolling. For example, an eligibility screener noted that clients were very interested in the program early on, saying, “With the transition ... the population’s growing, and the work is increasing, and the phone calls – because those who were already in the program knew that, you know, they were entitled to the incentives.” A leader at one clinic, who ultimately reported being satisfied with the program, said that his clinic initially struggled to implement it because staff were already busy and because of the clinic’s small space.

Another concern about the program was clients’ use of the incentive money. Some nurses and client care staff worried that clients would use the financial incentives for items that would further deteriorate their health. One client care staff member said, “I know that they automatically are going to go down to the convenience store on the corner, and they are going to spend their money getting [alcohol].” A staff nurse described her suspicion that some clients might use the money for unhealthy behaviors:

Some of our clients that are definitely in need or are on a fixed income, they really do appreciate it, but, on the other hand too, we still have those clients that we suspect, because of course we haven’t seen this, that could be using the money to engage in harmful behavior.

Another nurse said, however, that the program was helpful regardless of how clients used the incentive: “But they made the appointment, and they are doing good. They may have an alcoholic problem, but they made their appointment, and their numbers are going up.”

Growing support. All respondents who were initially skeptical of the program said that their opinions changed after they saw the program in operation. For example, a case manager said that perspectives of several staff members changed at their clinic once the program was implemented, saying, “Definitely people were naysayers ... but that attitude has certainly changed.” Another staff member

acknowledged having concerns about the ethics of the incentive program, but felt it was successful regardless, saying, “People should want to be healthy, but sometimes I think the incentive is a push for them to just kind of get them involved and get them engaged in their own health.” One manager described how his opinion changed over time:

Incentivizing care, I hated. I did not wanna do it ... I can't say I fought it, but I just doubted that there would be success in this ... I'm glad I was able to keep that in check through this because I think what we have seen is that it makes a difference, regardless of my personal views and opinions.

Other staff members said that they had reservations about the ethics of the program but that it was a cost-effective means to improve client and community health. For example, a client services provider remained concerned about the program’s rationale, but said, “The way I can get behind the program is I translate that into then there are less people getting infected.” A nurse expressed support for the program despite concerns about its rationale: “The fact that we’re conceivably, you know, helping slow the spread of HIV, that, to me, is the larger picture, the more important thing, rather than the fact that we’re giving somebody money to actually come to their appointments.”

Perceived Benefits for Clinics, Patients, and the Provider-Patient Partnership

Most participants said that the program improved clinic operations along with helping care for patients. Nearly all said that the program helped provide needed resources for patients outside the scope of what the clinic was able to offer. Some providers said it helped them to form better partnerships with their patients. For some, the program gave them more opportunities to provide education about HIV to patients, which helped to build patient interest in their own health and to modify some patients’ outcome expectations related to HIV treatment.

Resources for patients. Some of the people we interviewed said that their clients struggled to pay medical expenses, and that they used the incentive to offset these costs. Medical costs, which varied depending on client eligibility for assistance programs, could include insurance premiums, medication co-payments, and treatment for other health problems. “HIV treatment is still really expensive,” said one

project manager, “and the burden of HIV is still faced ... by a population who has extremely limited financial resources.” Staff members said that clients used the incentives for co-pays for their medications. A leader at one clinic said, “It helps because people with HIV have higher – high costs. They generally have a number of health problems ... so it’s not just HIV medications, but other medications that he takes.” Another staff member said that the incentive program could be helpful for clients who were ineligible for other assistance programs. “Who really suffers,” she said, “are those middle-class folks who don’t necessarily qualify for some of the programs or that one single person who ... has all those other bills and things and has to meet his deductible on his own.”

Other staff members said that they believed that the incentive helped them address clients’ other needs that could interfere with HIV care. One said that some patients “prioritize other things above their HIV care, just because they have things to take care of at home or other family members to take care of.” A nurse said that some clients could not afford to miss work to attend appointments and that the incentive helped clients stay in care. Others said that clients used the incentive to pay utility bills, buy groceries, and pay medical bills. Another nurse said, “I had a client the other day saying that she needed to pay her light bill ... So what good is our meds gonna do you if you don't have a proper way to refrigerate them?” Similarly, a social worker said that clients used the incentive for food or transportation, saying, “This client might need to go and make groceries today, or this client might need gas.” Other staff members described clients using the incentive for children’s school supplies, transportation to the clinic, toiletries, and clothes for work.

Improved appointment keeping. Participants told us that the program improved clinic operations by improving appointment-keeping. Some interviewees said that missed appointments could be costly and that clinic staff “often struggled with what could we give, what could we do to encourage patients to keep their appointments.” Missed appointments reduced clinic efficiency and provider time for caring for other patients. A manager at one of the clinics described the problem of planning around missed appointments, saying,

I was anxious to participate in the program because ... we had a certain amount of no-

shows that were obviously not good for our clinic operations. You know, that's always troublesome in your clinic, that no-shows create the need to overbook, and then that becomes unpredictable, and that stresses the staff and the providers. So, my main interest was in reducing the no-show rate.

Most believed that the program improved appointment keeping, which improved clinic operations. One nurse said, "Those clients who are definitely harder to reach, they are really, really adamant about making sure that they get here to their appointments, taking their meds because they know that they will get that income, and it really does help them." Another nurse said, "People who are on the program show up more for their regular appointments." Other staff echoed this perception. "I think there's definitely been a decrease in no-shows," said one project manager. "I think these clients are definitely coming to their appointments more ... They just sorta – definitely follow through with something that we were not able to get them to accomplish."

Forming partnerships with patients. Several providers said that the program improved communication and helped build rapport with their patients. Some believed that the extra interactions explaining the program's requirements and tracking patient progress improved relationships with clients and increased clients' willingness to discuss the diagnosis. One nurse said that discussing the incentive program helped her relationship with clients because it "definitely helps me know my patient better." A director of clinical services said, "The incentive program for this population encourages them to come [and] maintain a relationship with your primary provider."

Many interviewees said that the program facilitated caring for patients because the patients were more engaged in their own health care. A medical director said that after the program began, "Some of the people that previously didn't care ... they're caring now." Another described the financial incentive as "a nudge to want to be virally suppressed."

Some providers said that they were better able to explain the details of the diagnosis and treatment because clients were more engaged and asked more questions. A screener said that clients "are asking more about their care because they [are] becoming more engaged, and they want to understand

what's going on with their bodies." Another said that, after the program began, "[Clients] are more concerned about their CD4 counts. They are more concerned with their numbers going up because they know the higher their numbers, more incentive ... 'What can I do, and am I doing this right?'" Several participants said the clients asked more questions about their lab results because of the incentive program, and that it "helped them to get more involved in their care." Several others said that they saw better adherence to treatment regimens as a result of the program.

Although the majority of staff reported that they saw improved client engagement because of the program, this was not always the case. A few said that some patients remained unchanged by the program. For example, a nurse said, "For some patients, it's worked well; for other patients, they're just getting their \$35.00 and are happy." Similarly, a project manager said some patients were not ready to engage in care despite the incentive.

Opportunities for education. Many interviewees said that they had more opportunities to educate clients about health care and HIV treatment because the incentives increased attendance at appointments. Some described having difficulty explaining facts about HIV and the importance of adhering to treatment before the incentive program began, and that the program increased client understanding of the clinic's regular education. For example, a nurse said, "Even though we educate clients, some clients really still don't understand CD4 and viral load, but it seems, with this program, they really get it." Several persons said that they believed that clients' knowledge about "their health care and what their numbers mean" improved during the program.

Several staff members also said that the program allowed them to better address clients' high-risk health behaviors because of better appointment keeping and better rapport with clinic staff. A case worker described the need for education about risky behaviors and said that the program helped address this need: "They didn't know about HIV, of sharing of needles, prostitution, being unprotected sexually, you know ... so, go get your money, and come back, and I'll teach you some more stuff."

For clients who were newly diagnosed with HIV, providers said that the incentive was a particularly useful tool because "the initial engagement in care is probably the most crucial." These

providers said that the incentive helped to engage newly diagnosed clients in learning about and managing their HIV care. A medical director said, “With the newer patients, you get a chance to teach them from the ground up, and that’s a great time to have those kind of programs in place so that they can learn right from the beginning this is important.”

Some providers said that the incentive was helpful for providing education for clients even if they were frustrated because of the program. A nurse said that some patients became upset if they were ineligible for a particular incentive, but that she was able to use this frustration for education about working toward a lower viral load: “If their viral load isn’t, you know, within the right range to get the gift card ... they kind of get pissed off about that ... but it’s an education opportunity.”

Helping clients form new habits. Some participants said that the incentives helped them teach new habits to clients who had limited experience with preventive care. A case manager said, “Wellness visits are a brand new idea for a bunch of folks that are participating in the program,” and, by increasing clients’ likelihood of attending appointments, providers had more opportunities to explain the importance of preventive care to clients who typically only visited the care provider when very ill. Another case manager said that, over time, some clients’ initial interest in the incentive changed their approach to preventive care:

In the beginning, you had some that was just strictly about the card, about the money.

And as time goes, those very clients ... shift gears ... After a while, you start to see them – sometimes they don't even get a chance to go get their cards because they forget about it because they have already, “Oh, I'm on my appointments to get my labs. The doctor is saying I'm doing good. I'm virally suppressed.” They do the little dances.

Several participants believed that the program’s value would last after it ended and that patients’ new habits would persist even without the incentives. One interviewee described it as “a reward system. So, if you do this and be good with this, then this is your reward for doing it, until eventually, when you do remove the reward, it's an automatic response.” An administrator believed that clients would stay in care because the program improved rapport with physicians and nurses. She said, “We should also be

doing enough education that, hopefully, it'll become second nature to them." Another staff member expressed a similarly hopeful outlook: "If it stopped, I think the people would still be engaged and still be proactive ... 95% of them would still do what they are supposed to do basically to remain virally suppressed." A case manager said that, while some patients might fall out of care again, the majority would "attempt to maintain those skills learned."

Engaging patients and modifying outcome expectations. Participants said that the program also helped to incentivize treatment for clients who were initially overwhelmed by the requirements of treating HIV infection and who did not expect their health to improve. A physician explained how some clients saw progress in their health status over time, illustrating why the short-term incentive helped to engage clients initially:

I think when a person first comes in, they're really feeling bad, and I think in their minds sometimes they doubt whether they're going to feel better. And then, about 6 months to a year later when they are feeling better, and they've gained weight, and they look better, I think it finally sinks in to them that, yeah, if I take these pills then I'm going to be better. I'm going to feel better.

For these clients, the financial incentives helped providers work with clients to build a sense of efficacy about their health care and treatment. One case manager said, "Maybe the money got them kick-started on it, but now that they are forming habits and feeling better and feeling like they can do this."

This point was echoed by others. Clinic staff said they believed the program improved adherence to medication and treatment regimens, which, over time, led to improvements in health. Specifically, the incentive operated as a short-term bridge for clients to get to a point where they could feel better, at which point they could see the value of adherence to treatment and were sufficiently motivated to remain in care. As one staff member said:

People want the \$75 or however much to become undetectable; once they become undetectable, that's like a milestone for them. So, they know that their risk of transmission is reduced, and they are probably feeling a lot better than they were when

they were initially diagnosed ... That by itself is probably the determining factor, knowing that, yes, you still have to live with this, but you don't have to be sick or anything like that, and you can still protect your partners and yourself.

In particular, nurse practitioners, case workers, and other client care professionals reported seeing differences in the health of clients who were given financial incentives to engage in care. Some attributed higher rates of viral suppression to the financial incentives program.

Community Health

Some participants said that they viewed the program as a way to protect community health because HIV is a communicable disease. They said that its reach extended beyond its effect on an individual patient's appointment keeping and health habits, because that patient's new protective behaviors and reduced viral load reduced the risk of transmission to other community members. A nurse said that, if more clients had undetectable viral loads, they were less likely to transmit the infection to others: "By keeping others virally suppressed, we are improving community health and ... decreasing the health care costs because the virus is not being spread." An administrator said that she supported the program because it could improve health outcomes not just for clients but for the community as a whole:

We're talking about a communicable disease. We're not talking about your diabetes ...

We're talking about a disease that you can give to someone else, and, if we can virally suppress you, ... we can ensure that you don't give it to somebody else.

Sustainability

For many participants, their overall perspective on the program depended on whether or not it would be cost-effective and sustainable. Many perceived that it would prevent longer term, high cost health problems and that it was cost-effective for that reason, but others worried that it would not be sustainable over a long period of time.

Many of the clinic staff said that the incentives program could be cost-effective if it prevented more expensive treatment and transmission of the infection to others. One chief financial officer described the program as "much cheaper ... than [spending] hundreds and hundreds of thousand dollars

on care after someone becomes ill.” Similarly, one provider discussed the program’s impact on the clients being treated and their reduced likelihood of transmitting the infection to someone else:

I try to think of it in a more grand view as in – if someone – if we're keeping someone's viral load low, then they're less likely to pass on, you know, the infection, someone else with an infection of HIV ... I do think the tradeoff is worth it if truly what we're spending is, like, \$200.00 or something small compared to – since I know how much medications cost – thousands that we could be spending.

Others, however, remained skeptical about the program’s sustainability, particularly if more patients began to participate. One nurse said, “I don’t have a clear understanding of how it could last for thousands of people over, you know, 5, 10, 15 years.” Some acknowledged the sizable initial investment required for an incentive program. A chief financial officer said she believed the program had been a success, but noted that smaller clinics would not be able to independently fund a similar program: “For us, it works really well, and it is, like I said, cheaper in the long run. But smaller agencies are not gonna have that kind of money.” Finally, a case manager worried about the lack of research on incentive programs, asking, “What are the long-term implications of this? ... Is there something that we are not considering, or are we creating something that isn’t sustainable?”

Some participants said they were concerned that the program offered only a temporary solution and that ending it could negatively impact patients. Some said they believed that patients would return to old habits and drop out of care if the incentives stopped, particularly if they needed to miss work for the appointments. A project manager said, “My only concern would be that the funding would stop, and then clients would say, ‘Well, I’m not showing up for my medical appointment.’” Similarly, a nurse said patients would “probably go back to their old pattern of missing more doses.” Another staff member expressed concern about new patients diagnosed after the program’s end, saying, “If someone was newly diagnosed and said that they knew that this program used to exist or something like that, it may or may not discourage them.” One staff member questioned whether clients would continue to engage in care without the financial incentives, asking,

Are you really creating those kind of good relationships and good health habits, or are you just throwing money at people, and, the second you stop, they stop coming to their appointments? What are the long-term implications of this?

Most staff members, however, expressed the hope that the program would continue in the future. Several participants referred to early skepticism and how some opinions had changed. For example, a nurse said, “Initially, I felt that it’s quite ridiculous, but, after a couple of months, and we saw that especially more of our non-compliant clients were really engaged, we really encouraged and appreciated the reward.” A manager at one clinic, expressing a change of perspective echoed by others we interviewed, said, “I’ve learned a lot ... If we’re really serious about making sure people have access to care, get into care, and stay in care, we have to try things that we may not necessarily personally agree with.”

Discussion

Provider perspectives are a key factor in the effective implementation of an incentive program. In our interviews, many clinic staff said that they believed that the financial incentive program benefited clients and that it facilitated clinic operations and providers’ treatment of clients. While most interviewees viewed the program as helpful, several noted concerns about the premise of the program as well as its lasting effects.

Although some clinic staff said they were opposed to the program when it began, most considered it helpful for the practice and their patients. Some participants, particularly those who worked in social services, were more welcoming of the program from the beginning and considered it an opportunity to provide needed resources to clients. Others remained opposed to the premise of the program – that clients were being paid to receive medical care – but noted that it successfully engaged clients in care despite their reservations. These findings can inform implementation of other financial incentive programs for PLWH or other diagnoses by providing a context for the program and suggestions for how it could augment clinic services or complement providers’ partnerships with their patients. Future research should address provider concerns about the long-term effects of incentive programs.

Our interview data suggest that the staff felt that the program facilitated provider abilities to care for their patients, many of whom were from high-needs populations. Interviewees suggested that part of the program's value was that it reduced some barriers to obtaining care – for some clients, it addressed needs outside the scope of what the clinic was able to provide, and, in doing so, facilitated providers' treatment of and partnership with these patients. Consistent with Maslow's hierarchy of needs (Maslow, 1943), PLWH who had competing needs, such as for food or shelter, might, as one provider stated, "prioritize other things above their HIV care." Participants reported that the incentive served as a tool for them to address some patients' competing needs.

While data are limited on the effect of incentive programs specifically for PLWH, the perceptions we found were consistent with positive effects on medication adherence and appointment keeping reported for similar programs (Giuffrida & Torgerson, 1997; Lussier et al., 2006; Petry et al., 2012). The expense of missed appointments for hospitals and clinics has been well documented (Gupta & Denton, 2008; Moore, Wilson-Witherspoon, & Probst, 2001), and, in our interviews, clinic staff believed the program improved clinic operations because fewer missed appointments partially alleviated the need for clinics to overbook their schedules.

The interviews also suggest that the staff perceived an improvement in the clinician-patient partnership because patients were more engaged in their care and motivated to learn about treatment. Managing HIV care, as with other chronic health conditions, requires a partnership between patients and their clinicians (Davis, Wagner, & Groves, 2000; Mallinson, Rajabiun, & Coleman, 2007). Participants in our study felt that incentives motivated some patients to reengage in care and to become more invested in learning about treatment. In our study, incentives served as a tool for HIV providers to build a partnership with patients; incentives may also be useful for clinician-patient relationships for patients with other diagnoses.

Clinic staff also believed that incentives helped them provide patients education and to correct misperceptions about HIV, risk behaviors, and treatment effectiveness. Several participants described clients who lacked complete information about HIV and treatment options, which impacted clients'

abilities to make decisions about their own health. Because clients attended more of their appointments after the program began, clinic staff had more opportunities to share information with their clients. Additionally, providers were better able to educate clients about how to achieve viral suppression because incentives increased client interest in decreasing viral loads.

Study Limitations

Our findings should be interpreted in light of study limitations. We conducted interviews with a purposive sample of health care providers, administrators, and social services staff from three clinics in urban areas in Louisiana with a high prevalence of HIV. In addition, implementation sites for the program were not selected randomly. Therefore, the viewpoints considered here may not be generalizable beyond these three clinics. Staff from the Louisiana Office of Public Health selected potential participants who had a variety of professional responsibilities; findings were limited to opinions expressed by clinic staff who were selected to participate and who then agreed to be interviewed. Staff who did not agree to participate may have had differing viewpoints from those who did. Nevertheless, we believe that the interviews provided valuable information related to the implementation of a financial incentive program for PLWH.

Conclusions

The success of implementing financial incentive strategies that are novel and have the potential to be met with resistance by clinic staff and leadership depends, in part, on the perceptions of those implementing the program. Our participants' initial concerns and ultimate perceptions of the program's value can inform future implementation of similar programs. Our interviews provided data that indicated that most clinic staff believed the Health Models incentive program helped improve HIV care by (a) providing low-income patients with financial assistance that helped to offset other needs that could distract them from care, (b) improving appointment keeping, (c) improving patient engagement, and (d) incentivizing the development of new habits related to HIV treatment and preventive care. Understanding this implementation context could inform future efforts in terms of how such an intervention is introduced to clinics through information campaigns and staff training. We also detailed important concerns of clinic

staff about the efficacy and sustainability of this type of program. Research should address these questions. We have articulated these concerns in order to provide a better understanding of providers' perspectives, which can be instrumental in the introduction of such programs in the future.

ACCEPTED MANUSCRIPT

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Key Considerations

- Financial incentive programs have improved health behaviors and adherence to treatment, but implementing these programs successfully depends, in part, on provider and staff support for the program.
- In our study, some staff expressed concerns about the ethics of the program and sustainability, but all said that they were eventually supportive of the program and viewed it as beneficial for the clinic and for patients.
- Clinic staff reported that incentives helped to build a patient-provider partnership and to better engage patients in health care.
- Clinics planning to implement a financial incentives program, whether for clients living with HIV or other diagnoses, should address provider concerns before implementation and provide information about how the program may be used to complement provider partnerships with their patients.